

U.S. Serial No. 10/047,072  
Response to Office Action mailed May 19, 2006

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**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1 (currently amended): An *in vitro* method for producing stable mature dendritic cells from pluripotential cells, comprising:

a) contacting [[the]] human pluripotential cells having the potential of expressing either macrophage or dendritic cell characteristics with a combination of GM-CSF and IL-4 or IL-13 for a time sufficient to produce immature dendritic cells, wherein the GM-CSF, IL-4 and IL-13 are human cytokines; and

b) adding a composition selected from the group consisting of peripheral blood mononuclear cell conditioned medium, monocyte conditioned medium [[or]] and fixed Staphylococcus aureus Cowan 1 strain (SACS) to the immature dendritic cells produced in step (a) and culturing the cells for a time sufficient for the immature dendritic cells to produce stable mature dendritic cells that express a characteristic of mature dendritic cells,

wherein the characteristic is selected from the group consisting of increased CD83 expression, increased CD86 expression, decreased CD115 expression, and decreased CD32 expression relative to the immature dendritic cells.

Claim 2 (original): The method of claim 1, wherein the pluripotential cells are CD14 positive mononuclear pluripotential cells.

Claim 3 (original): The method of claim 1, wherein the pluripotential cells are peripheral blood mononuclear cells.

Claim 4 (original): The method of claim 1, wherein the pluripotential cells are monocytes.

Claim 5 (currently amended): The method of claim 1, wherein the composition further comprises human GM-CSF.

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Claim 6 (currently amended): The method of claim 5, wherein the composition further comprises ~~a cytokine selected from the group consisting of human IL-4; IL-13; IL-4 and IL-1 $\beta$ ; IL-13 and IL-1 $\beta$ ; IL-4 and TNF- $\alpha$ ; IL-13 and TNF- $\alpha$ ; IL-4, IL-1 $\beta$ , and TNF- $\alpha$ ; IL-13, IL-1 $\beta$ , and TNF- $\alpha$ ; IL-4 and IL-12; IL-13 and IL-12; IL-4 and stem cell factor; IL-13 and stem cell factor; IL-4 and IL-15; and IL-13 and IL-15.~~

Claims 7-9 (cancelled)

Claim 10 (currently amended): The method of claim ~~[[6]]~~ 1, wherein the GM-CSF is present at a concentration of between about 200 U/ml to about 2000 U/ml.

Claim 11 (previously presented): The method of claim 1, wherein the dendritic cells express high levels of MHC class molecules.

Claim 12 (previously presented): The method of claim 1, wherein the dendritic cells have the capacity to stimulate resting T cells.

Claim 13 (new): The method of claim 1, wherein the human GM-CSF is recombinant human GM-CSF.

Claim 14 (new): The method of claim 1, wherein the human IL-4 is recombinant human IL-4.